WHAT IS CLAIMED IS:

1. A method for differentiating if a feedback signal is a result of an unintentional collision in a servo system, said method comprising injecting a feed forward term in the servo system.

2. A method in accordance with Claim 1 wherein said injecting a feed forward term comprises injecting a feed forward term derived from a force function x_i.

3. A method in accordance with Claim 1 wherein said injecting a feed forward term comprises injecting a feed forward term derived from a force function x_i such that y_o/x_i is optimized, where y_o is an output of the servo system.

4. A method in accordance with Claim 1 further comprising optimizing y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function and y_o is an output of the servo system.

5. A method in accordance with Claim 2 further comprising optimizing y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function and y_o is an output of the servo system.

6. A method in accordance with Claim 3 further comprising optimizing y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function.

7. An imaging system comprising:

a radiation source;

a radiation detector positioned to receive radiation emitted by said source;

a servo system configured to position at least one of said source, said detector, and an object to be scanned; and

a computer operationally coupled to said source, said detector, and said servo system, said computer configured to inject a feed forward term in said servo system.

8. A system in accordance with Claim 7 wherein said computer further configured to inject a feed forward term derived from a force function x_i.

9. A system in accordance with Claim 8 wherein said computer further configured to inject a feed forward term derived from a force function x_i such that y_o/x_i is optimized, where y_o is an output of said servo system.

10. A system in accordance with Claim 7 wherein said computer further configured to optimize y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function and y_o is an output of said servo system.

11. A system in accordance with Claim 8 wherein said computer further configured to optimize y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function and y_o is an output of said servo system.

12. A system in accordance with Claim 9 wherein said computer further configured to optimize y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function.

13. A computer-readable medium encoded with a program configured to instruct a computer to inject a feed forward term in a servo system.

14. A computer-readable medium in accordance with Claim 13, wherein said program is further configured to instruct the computer to inject a feed forward term derived from a force function x_i.

15. A computer-readable medium in accordance with Claim 13, wherein said program is further configured to instruct the computer to inject a feed

forward term derived from a force function x_i such that y_o/x_i is optimized, where y_o is an output of the servo system.

16. A computer-readable medium in accordance with Claim 13, wherein said program is further configured to instruct the computer to optimize y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function and y_o is an output of the servo system.

17. A computer-readable medium in accordance with Claim 14, wherein said program is further configured to instruct the computer to optimize y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function and y_o is an output of the servo system.

18. A computer-readable medium in accordance with Claim 15, wherein said program is further configured to instruct the computer to optimize y_o/x_2 without the influence of the feed forward, wherein x_2 is a load function and y_o is an output of the servo system.

19. A method of configuring a servo system with an initial aggressiveness level for responding to a collision and a desired aggressiveness level for responding to an input control signal, said method comprising:

reducing the initial aggressiveness level for responding to a collision; and

maintaining the desired aggressiveness level for responding to the input.

20. A method in accordance with Claim 19 wherein the servo system includes a feedback system, said reducing the initial aggressiveness level comprises reducing the initial aggressiveness level by optimizing the feedback system for collisions.

21. A method in accordance with Claim 20 wherein said maintaining the desired aggressiveness level for responding to the input comprises maintaining the desired aggressiveness level for responding to the input by providing a feed forward term to the servo system.